

California Regional Water Quality Control Board  
Santa Ana Region  
3737 Main Street, Suite 500  
Riverside, CA 92501-3348

**NOTICE OF PUBLIC HEARING**

For  
ORDER NO. R8-2006-0038  
Amending Order No. R8-2004-0020, NPDES NO. CA8000073  
For  
Inland Empire Utilities Agency  
Carbon Canyon Water Reclamation Facility  
San Bernardino County

On the basis of preliminary staff review and application of lawful standards and regulations, the California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Water Board), proposes to amend the waste discharge and producer/user water recycling requirements for the Inland Empire Utilities Agency's Carbon Canyon Water Reclamation Facility to extend the compliance date for complying with the final effluent limitations for free cyanide that are specified in the Order. Additional time is necessary to identify and implement appropriate control measures.

The Board is seeking comments concerning the proposed amendment to waste discharge and producer/user water recycling requirements and the potential effects of the discharge on the water quality and beneficial uses of the affected receiving waters.

The Board will hold a public hearing to consider adoption of the proposed waste discharge requirements as follows:

DATE: May 19, 2006  
TIME: 9:00 a.m.  
PLACE: City Council Chambers of Loma Linda  
25541 Barton Road  
City of Loma Linda

Interested persons are invited to submit written comments on the proposed Order No. R8-2006-0038. Interested persons are also invited to attend the public hearing and express their views on issues relating to the proposed Order and submission. Oral statements will be heard, but should be brief to allow all interested persons time to be heard. For the accuracy of the record, all testimony (oral statements) should be submitted in writing.

Although all comments that are provided up to and during the public hearing on this matter will be considered, receipt of comments by May 1, 2006 would be appreciated so that they can be used in the formulation of the draft Order that will be transmitted to the Board two weeks prior to the hearing. The draft Order may contain changes resulting from comments received from the public. To view on/or download a copy of the draft Order, please access our website at [www.waterboards.ca.gov/santaana](http://www.waterboards.ca.gov/santaana) on or after May 8, 2006.

The Board's proposed Order, related documents, and all comments and petitions received may be inspected and copied at the Regional Board office, 3737 Main Street, Suite 500, Riverside, CA 92501-3348 (phone 951-782-4130) by appointment scheduled between the hours of 9:00 a.m. and 3:00 p.m., Monday through Friday. Copies of the proposed Order will be mailed to interested persons upon request to Jane Qiu at (951) 320-2008.

Any person who is physically challenged and requires reasonable accommodation to participate in this Regional Board Meeting should contact Felipa Carrillo at (951) 782-3285 no later than May 8, 2006.

California Regional Water Quality Control Board  
Santa Ana Region

May 19, 2006

**STAFF REPORT**

**ITEM:**

**SUBJECT:** Amendment of Order No. R8-2004-0020, NPDES No. CA8000073, Waste Discharge and Producer/User Water Reclamation Requirements for Inland Empire Utilities Agency's Carbon Canyon Water Reclamation Facility - Order No. R8-2006-0038

**DISCUSSION:**

On August 13, 2004, the Regional Board adopted Order No. R8-2004-0020, NPDES No. CA8000073, prescribing waste discharge and Producer/User Water Reclamation Requirements for Inland Empire Utilities Agency's Carbon Canyon Water Reclamation Facility, for the discharge of tertiary treated wastewater into Reach 2 of Chino Creek, a tributary to Reach 3 of the Santa Ana River.

Order No. R8-2004-0020, NPDES No. CA8000073 included interim and final effluent limitations for free cyanide, including a time schedule for compliance with the free cyanide final effluent limitation in accordance with Section 2.1 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (the "SIP"). Order No. R8-2004-0020 specified that compliance with the final free cyanide limitations in the Order be achieved as soon as possible but no later than December 31, 2005, unless the discharger provides justification that compliance by this date is infeasible. The Discharger implemented an approved plan and schedule for achieving compliance with the final free cyanide effluent limitations and submitted quarterly progress reports for achieving compliance. However, on December 14, 2005, the Discharger requested an extension of the compliance schedule and interim limits in the Order.

Currently, the Discharger is conducting an agency-wide cyanide study that includes all IEUA treatment plants (RP-1, RP-4, RP-5 and the Carbon Canyon Water Reclamation Facility). Because the cyanide study involves treatment plant processes and flows that fluctuate significantly throughout the year, the Discharger has experienced unanticipated difficulties in determining whether variations in the concentrations of weak acid dissociable cyanide (WAD-CN) (free cyanide) in their discharges are due to variations in the treatment process or simply reflect temporal variability. An extension of the compliance schedule to resolve questions related to free cyanide is justified. The revised schedule continues to require that the Discharger comply with the final limits for free cyanide as soon as possible.

The following show the proposed changes to the Order. Additions are bold and highlighted. Deletions are stricken-out.

1. Findings Section of Order No. R8-2004-0020, page 6 of 32, modify Finding 28. as follows:

28. On July 1, 2004, IEUA requested that a compliance schedule for free cyanide limitations be included in this Order. IEUA demonstrated that immediate compliance with the proposed effluent limitations for free cyanide is infeasible. Prior to December 2003, IEUA had conducted analysis for total cyanide, rather than free cyanide, in samples collected from all IEUA treatment plants, in accordance with then applicable waste discharge requirements. IEUA began analysis for free cyanide in December 2003. The data indicate the likelihood that free cyanide is formed during the disinfection process at CCWRF. IEUA has initiated a free cyanide investigation that will address all treatment plants (RP-1, RP-4, RP-5 and CCWRF). The first phase of the investigation will focus on CCWRF. Data collection is expected to be complete by December 31, 2004. Based on analysis of these data and review of experience with this problem elsewhere, the need for and type of remedial actions will be identified. It is anticipated that compliance will be achieved as soon as possible but no later than ~~December 31, 2005~~ **October 21, 2007**. This schedule will be reconsidered and revised as appropriate if it is demonstrated that additional time is required to identify and implement appropriate control measures. This Order will be reopened to consider appropriate changes to the compliance schedule if and as necessary based on submission of additional justification.

2. Discharge Specifications Section of Order No. R8-2004-0020, page 9 of 32, modify Trace Constituent Limitations Table in Discharge Specifications A.1.e. as follows:

Constituent	Maximum Daily Concentration Limit	Average Monthly Concentration Limit	Maximum Daily Mass Emission Rate <sup>5</sup>	Average Monthly Mass Emission Rate <sup>5</sup>
	(µg/l)	(µg/l)	(lbs/day)	(lbs /day)
Final Limit effective August 13, 2004				
Total Recoverable Chromium VI <sup>12</sup>	16.3	8.2	1.55	0.78
Total Recoverable Selenium	8.2	4.1	0.78	0.39
Bis(2-ethylhexyl) phthalate	11.8	5.9	1.12	0.56
Interim Limit effective from August 13, 2004 through <del>December 31, 2005</del> <b>October 21, 2007</b> <sup>13</sup>				
Free Cyanide	8.5	8	0.81	0.76
Final Limit effective <del>January 1, 2006</del> <b>October 22, 2007</b>				
Free Cyanide	8.5	4.3	0.81	0.41

<sup>12</sup> Total hardness used in calculating metal limits is 144 mg/l, based on the median of CCWRF effluent flow data from January 2000 through December 2003.

<sup>13</sup> See Section H. 10. Required Notices and Reports; Section K.9. Permit Re-opening, Revisions, Revocation and Re-issuance; and J. 27. Provisions

3. Required Notices and Reports Section of Order No. R8-2004-0020, page 24 of 32, modify Required Notices and Reports H.10.c. as follows:
  - c. A proposed plan and schedule for implementation of recommended control measures. The plan and schedule shall assure that control measures are implemented so that compliance with the final free cyanide limitations in this Order is achieved as soon as possible but no later than ~~December 31, 2005~~ **October 21, 2007**, unless the discharger provides justification that compliance by this date is infeasible. (see also K. 9. Permit Re-opening, Revision, Revocation and Re-issuance.)

**RECOMMENDATION:**

Adopt Order No. R8-2006-0038, as presented.

Comments were solicited from the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) – Doug Eberhardt  
U.S. Army District, Los Angeles, Corps of Engineers, Regulatory Branch  
U.S. Fish and Wildlife Service, Carlsbad  
State Water Resources Control Board, Office of the Chief Counsel - Jorge Leon  
State Water Resources Control Board, Division of Water Quality - James Maughan  
State Department of Water Resources, Glendale  
State Department of Fish and Game, Ontario  
State Department of Health Services, San Bernardino – Sean McCarthy  
San Bernardino County Transportation/Flood Control District – Naresh Varma  
San Bernardino County Environmental Health Services – Daniel Avera  
Orange County Water District - Nira Yamachika  
City of Chino - Public Works Department, Engineering Division – Jim Hill  
City of Chino Hills, Public Works Department  
City of Upland, City Manager  
City of Montclair, Mike Hudson  
Santa Ana River Discharger's Association – Roger Turner  
Santa Ana Watershed Project Authority – Daniel Cozad  
Orange County Coastkeeper  
Lawyers for Clean Water C/c San Francisco Baykeeper

California Regional Water Quality Control Board  
Santa Ana Region

ORDER NO. R8-2006-0038

Amending Order No. R8-2004-0020, NPDES No. CA8000073  
Waste Discharge and Producer/User Reclamation Requirements

for

Inland Empire Utilities Agency  
Carbon Canyon Water Reclamation Facility  
San Bernardino County

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter, Board), finds that:

1. On August 13, 2004, the Board adopted Order No. R8-2004-0020, NPDES No. CA8000073, prescribing Waste Discharge and Producer/User Reclamation Requirements for Inland Empire Utilities Agency's (IEUA) Carbon Canyon Water Reclamation Facility for the discharge of tertiary treated wastewater into Reach 2 of Chino Creek, a tributary to Reach 3 of the Santa Ana River. Order No. R8-2004-0020 will expire on August 1, 2009.
2. Order No. R8-2004-0020, NPDES No. CA8000073 includes interim and final effluent limitations for free cyanide and a time schedule for compliance with the free cyanide final effluent limitations in accordance with Section 2.1 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California. Order No. R8-2004-0020 specifies that compliance with the final free cyanide limitations in the Order is to be achieved as soon as possible but no later than December 31, 2005, unless the discharger provides justification that compliance by this date is infeasible.
3. On December 14, 2005, the Discharger requested an extension of the compliance schedule and interim limits in Order No. R8-2004-0020 based on the determination that the results of the studies that had been conducted were inconclusive and that additional investigation was therefore required.
4. Currently, the Discharger is conducting an agency-wide cyanide study that includes all IEUA treatment plants (RP-1, RP-4, RP-5 and Carbon Canyon Water Reclamation Facility). Because the cyanide study involves treatment plant processes and flows that fluctuate significantly throughout the year, the Discharger has experienced unanticipated difficulties in determining whether variations in the concentrations of weak acid dissociable cyanide (WAD-CN) (free cyanide) in their discharges are due to variations in the treatment process or simply reflect temporal variability.
5. It is appropriate to extend the compliance schedule and interim limits in Order No. R8-2004-0020, in light of the difficulties encountered in identifying and correcting free cyanide levels in the Discharger's wastewater discharges.

6. In accordance with Water Code Section 13389, amending the waste discharge requirements for this discharge is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (commencing with Section 21100), Division 13 of the Public Resources Code.
7. The Board has notified the discharger and other interested agencies and persons of its intent to amend waste discharge requirements for the discharge and has provided them with an opportunity to submit their written views and recommendations.
8. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED** that Order No. R8-2004-0020 be amended as follows:

1. Findings Section of Order No. R8-2004-0020, page 6 of 32, replace Finding 28. with the following:
  28. On July 1, 2004, IEUA requested that a compliance schedule for free cyanide limitations be included in this Order. IEUA demonstrated that immediate compliance with the proposed effluent limitations for free cyanide is infeasible. Prior to December 2003, IEUA had conducted analysis for total cyanide, rather than free cyanide, in samples collected from all IEUA treatment plants, in accordance with then applicable waste discharge requirements. IEUA began analysis for free cyanide in December 2003. The data indicate the likelihood that free cyanide is formed during the disinfection process at CCWRF. IEUA has initiated a free cyanide investigation that will address all treatment plants (RP-1, RP-4, RP-5 and CCWRF). The first phase of the investigation will focus on CCWRF. Data collection is expected to be complete by December 31, 2004. Based on analysis of these data and review of experience with this problem elsewhere, the need for and type of remedial actions will be identified. It is anticipated that compliance will be achieved as soon as possible but no later than October 21, 2007. This schedule will be reconsidered and revised as appropriate if it is demonstrated that additional time is required to identify and implement appropriate control measures. This Order will be reopened to consider appropriate changes to the compliance schedule if and as necessary based on submission of additional justification.

2. Discharge Specifications Section of Order No. R8-2004-0020, page 9 of 32, replace Trace Constituent Limitations Table in Discharge Specifications A.1.e. with the following:

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Final Limit effective October 22, 2007				
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3. Required Notices and Reports Section of Order No. R8-2004-0020, page 24 of 32, replace Required Notices and Reports H.10.c. with the following:
- c. A proposed plan and schedule for implementation of recommended control measures. The plan and schedule shall assure that control measures are implemented so that compliance with the final free cyanide limitations in this Order is achieved as soon as possible but no later than October 21, 2007, unless the discharger provides justification that compliance by this date is infeasible. (see also K. 9. Permit Re-opening, Revision, Revocation and Re-issuance.)
4. All other conditions and requirements of Order No. R8-2004-0020, shall remain unchanged.

<sup>12</sup> Total hardness used in calculating metal limits is 144 mg/l, based on the median of CCWRF effluent flow data from January 2000 through December 2003.

<sup>13</sup> See Section H. 10. Required Notices and Reports; Section K.9. Permit Re-opening, Revisions, Revocation and Re-issuance; and J. 27. Provisions

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the forgoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on May 19, 2006.

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Gerard J. Thibeault  
Executive Officer